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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,922	04/24/2006	Taturoh Katoh	107443-00045	2816
4372	7590	09/08/2009	EXAMINER	
ARENT FOX LLP 1050 CONNECTICUT AVENUE, N.W. SUITE 400 WASHINGTON, DC 20036			FRANKLIN, JAMARA ALZAIDA	
			ART UNIT	PAPER NUMBER
			2876	
			NOTIFICATION DATE	DELIVERY MODE
			09/08/2009	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DCIPDocket@arentfox.com  
IPMatters@arentfox.com  
Patent\_Mail@arentfox.com

# Office Action Summary

**Application No.**

10/576,922

**Applicant(s)**

KATOH ET AL.

**Examiner**

JAMARA A. FRANKLIN

**Art Unit**

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/86)  
Paper No(s)/Mail Date 4/24/06: 3/17/09
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Murata Kenichi (JP 2004009176, cited by applicant).

Murata Kenichi teaches

regarding claim 1, a stage device comprising a surface plate, two linear motors (servo-motor 1, 2) for respectively moving two moving bodies in one axis direction on said surface plate, a guide member for guiding at least one of said two moving bodies in said one axis direction, and a beam (table 7) laid between said two moving bodies so as to be orthogonal to said guide member and to be moved along with said two moving bodies, said stage device characterized by comprising:

two position sensors for respectively detecting positions of said two moving bodies,

two origin sensors for respectively defining origin positions of said two moving bodies,

and

a controller for, responsive to detection signals from said two position sensors and said two origin sensors, controlling said two linear motors to thereby perform a position control of said two moving bodies,

wherein said controller has a yaw axis rotation control function of individually controlling said two linear motors to thereby rotate said beam about a yaw rotation axis perpendicular to said one axis direction and, based on said yaw axis rotation control function, said controller performs, at the time of starting said stage device, a control of maintaining an orthogonality of said beam with respect to said guide member within a predetermined range even when the orthogonality of said beam with respect to said guide member changes (see abstract);

a stage device according to claim 1, characterized in that said controller comprises a storage unit storing therein a yaw axis rotation control program for performing said yaw axis rotation control function, and

said storage unit stores initial value data of said yaw axis rotation control program as a target value, wherein said target value is determined by said controller based on the orthogonality of said beam measured while said stage device is stopped, said target value being a correction value  $\Delta y_1$  necessary for causing the orthogonality of said beam to fall within said predetermined range;

a stage device according to claim 2, characterized in that said yaw axis rotation control program is for executing:

a step of driving, at the time of starting said stage device, said two moving bodies to positions detected by said two origin sensors in the state where the orthogonality of said beam is changed and calculating a difference  $\Delta y_3$  between two coordinate data obtained by said two position sensors at that time instant, and

a step of using said correction value  $\Delta y_1$  and said difference  $\Delta y_3$  and rotating said beam about said yaw rotation axis by  $(\Delta y_1 - \Delta y_3)$ ;

a stage device according to claim 3, characterized in that said controller calculates a difference  $\Delta y_0$  between two coordinate data obtained by said two position sensors when said moving bodies are moved to positions detected by said two origin sensors in the state where said stage device is placed as it is and stores the calculated difference  $\Delta y_0$  into said storage unit and said controller further determines said correction value  $\Delta y_1$  based on said calculated difference  $\Delta y_0$ ;

a stage device according to any of claims 1 to 4, characterized in that optical sensors or magnetic sensors are used as said origin sensors;

a stage device according to claim 5, characterized by comprising two guide members extending in parallel to each other in said one axis direction for respectively guiding said two moving bodies in said one axis direction,

wherein said beam has one end fixed to one of said two moving bodies and the other end joined to the other of said two moving bodies through a plate spring structure.

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Watanabe (US 5,539,532) teaches image reading apparatus with varied subscanning speed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMARA A. FRANKLIN whose telephone number is (571)272-2389. The examiner can normally be reached on Monday through Friday 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jamara A. Franklin/  
Primary Examiner, Art Unit 2876

JAF  
August 31, 2009